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10/086,762	02/28/2002	Robert Groten	22750/434A	1346

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KENYON & KENYON
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

DEL SOLE, JOSEPH S

ART UNIT PAPER NUMBER

1722

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,762

Applicant(s)

GROTEN ET AL.

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-18 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/515,866.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claim 18 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the response of 10/22/03.

Claim Objections

2. Claim 15 is objected to because of the following informalities: **a)** each claim must end in a period ".", therefore "in the second group" at line 7 of claim 15 must be changed to -- in the second group.--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 13 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Proulx (5,814,176).

Proulx teaches a die system (Fig 1, #28) having a polymer source (Fig 1, #20); a die in communication with the polymer source; a die plate (Fig 6) in fluid communication with the die, the die plate defining a first group of openings (Fig 8), the first group of openings having a first opening and a second opening, the first opening and the second opening configured to form at least two elementary polymer filaments (Fig 8); the die plate defines a second group of openings, the second group having a third opening and

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a fourth opening, the third opening and the fourth opening configured to form a third elementary fiber having a skin and a fourth elementary fiber having a skin (Fig 8); a die plate having a first opening and a second opening, the distance between the first opening and the second opening is equal to or greater than a quarter of the sum of the diameters of the first opening and the second opening and the distance between the first opening and the second opening is less than or equal to the sum of the diameters of the first opening and the second opening (col 3, line 62 - col 4, line 16).

The limitation "the first opening and the second opening further configured such that a bead of the polymer material exiting a die opening in the group contacts with at least one other bead of polymer material exiting another die opening in the group" fails to structurally limit the claimed apparatus because it merely recites the process of operating the apparatus in such a way that two beads contact one another. The similar limitation directed towards "third and fourth openings" similarly does not structurally limit the claimed apparatus. All structural limitations are taught. Furthermore, the claim limitation "containing a polymer under predetermined rheological conditions" is a process limitation directed toward the material process, and not directed to the structure of the apparatus, and therefore does not further limit the apparatus.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Proulx (5,814,176) in view of Schrenk (3,607,509).

Proulx teaches the apparatus as discussed above.

Proulx fails to teach a second polymer source in communication with the die.

Schrenk teaches an apparatus having a second polymer source (Fig 1, and col 2, line 68 - col 3, line 14) for the purpose of forming a composite product bonded filaments (Fig 9 and col 4, lines 30-41).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Proulx with a second polymer source as taught by Schrenk because it enables a bonded filaments product to be formed of a plurality of polymers.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Proulx (5,814,176) in view of Kamp (4,540,537).

Proulx teaches the apparatus as discussed above.

Proulx fails to teach a second polymer source in communication with the die.

Kamp teaches an apparatus having a second polymer source (Fig 4, #41) for the purpose of forming a composite product (Fig 4 and col 4, lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Proulx with a second polymer source as taught by Kamp because it enables a composite product to be formed.

Response to Arguments

10. Applicant's arguments filed 10/22/03, 11/20/03 and 12/30/03 have been fully considered but they are not persuasive.

The Applicant argues that the cited references do not disclose "a system configured to form at least two elementary filaments, the first opening and the second opening configured such that a bead of the polymer material exiting a die opening in the group contacts with at least one other bead of polymer material exiting another die opening in the group" as recited in claim 13 and do not disclose "a die plate in system configured such that the polymer from the die exiting the first opening forms a first bead

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and polymer from the die exiting the second opening forms a second bead, wherein the first bead and the second bead are in contact with one another" as recited in claims 16 and 17.

The Examiner disagrees. When two openings are separate from one another, and two beads traveling therefrom come in contact with one another, the coming together is a result of conditions upon which the materials exit and a result of the chemical qualities of the material. As the Applicant's drawings show, and the claims set forth, the die plate has two openings set apart from one another a certain distance. Proulx teaches such a die plate with set apart openings. The method of operation taught by Proulx, whether or not it is different from the method of operation of the Applicant's invention, does not serve to differentiate the structure taught by Proulx from the structure claimed.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non-after finals and (703) 872-9311 for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Joseph S. Del Sole

J.S.D.

January 26, 2004



ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300/1700

1/27/04